

## OCCURRENCE AND NESTING OF THE LEAST TERN AND OTHER ENDANGERED SPECIES IN BAJA CALIFORNIA, MEXICO

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The California Least Tern (*Sterna albifrons browni*) breeds from San Francisco Bay south along the coast of California to the Mexican border. It has also been reported earlier in the century breeding in Baja California, Mexico, at Scammons Lagoon (Bancroft 1927) and at the tip of the peninsula at San Jose del Cabo (Lamb 1927). There have, however, been no published reports of Mexican colonies in recent years.

In 1969 the Secretary of the Interior classified the California Least Tern as an endangered species because of its exceedingly reduced status as a breeding bird in California. The principle reason for its decline in numbers was loss of suitable nesting habitat. Least Terns once bred on sandy beaches close to estuaries all along the southern California coast. Heavy disturbance of our beaches, plus destruction of estuarine habitats, have forced the birds to use increasingly alien habitats in order to find nesting sites. Recent surveys (California Department of Fish and Game, Sacramento, unpublished reports: Bender 1973, 1974; Massey 1975; Jurek 1977) have established that approximately 600 pairs now return to breed where there were thousands in former times. The number of breeding pairs has remained stable over the past five years, since full protective measures were instituted, but the population is not considered sufficient to ensure the survival of this subspecies in California.

The precarious status of the California Least Tern in the United States gives insistence to the question of whether a reservoir of birds still breeds in Baja California. The recent opening of a new, paved road down the length of the peninsula has made Baja California infinitely more accessible than before 1974. It is now possible to travel the west coast as far south as Laguna Ojo de Liebre (Scammons Lagoon) without a 4-wheel drive vehicle. It has also opened the way for possible development of the great, unspoiled esteros of the west coast, development that could adversely affect the Least Tern and other endangered, estuary-dependent birds. In June-July 1975 Michael Evans, Kristen and John Bender, Dee Dee Rypka, Laura Jenner, Robert Vance, and the author made an exploratory trip to determine if and where Least Terns were nesting on the west coast of Baja California. A detailed report of our findings was made to the California Least Tern Recovery Team.

Our goal was to explore all accessible sites where Least Terns might nest along the coast between the U. S.-Mexican border and Laguna Ojo de Liebre. Least Terns customarily fish in the quiet waters of lagoons and estuaries and nest close by. We visited eight lagoons (Figure 1). While looking for Least Terns, we also checked for two other subspecies that are considered endangered in California, the Light-footed Clapper Rail (*Rallus longirostris lewipes*) and Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*). Both are residents of the *Salicornia-Spartina* saltmarshes associated with coastal lagoons. Our findings are summarized in Table 1.

A colony of 25-30 pairs of Least Terns was found at El Estero de Punta Banda, just south of Ensenada. The birds were nesting on a saltflat at the south end of the estero. The beaches around Ensenada are heavily used during the tern nesting season, and probably the birds have retreated to the saltflat in recent years, as they have done in many places in southern California. All stages of nesting were

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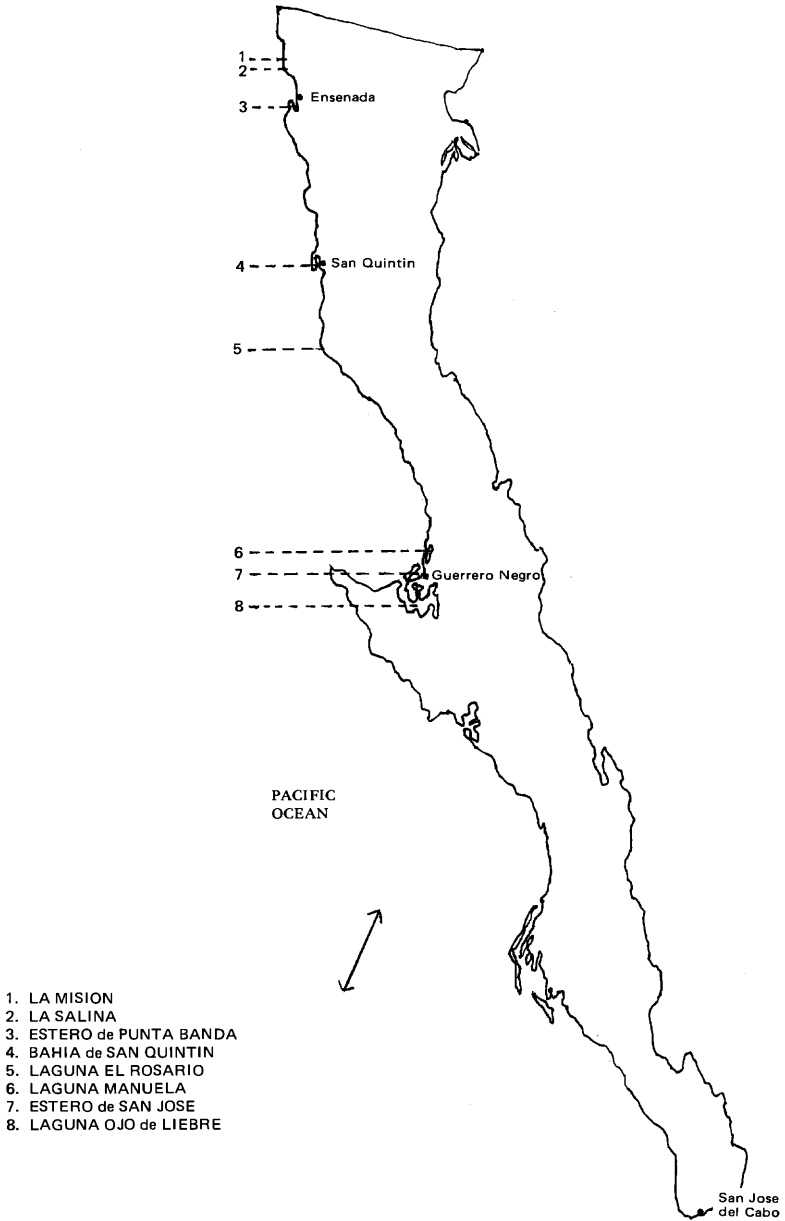


Figure 1. Lagoons of Baja California, Mexico visited in June 1975 in search of Least Tern nesting colonies.

## NOTES

Table 1. Occurrence of the California Least Tern, Light-footed Clapper Rail, and Belding's Savannah Sparrow on the west coast of Baja California, Mexico in late June 1975, South of Bahia de San Quintin, the subspecies *beldingi* of the Savannah Sparrow is replaced by *anulus*.

Location	California Least Tern	Light-footed Clapper Rail	Belding's Savannah Sparrow
La Mision, mouth of Rio San Miguel	absent	absent	abundant, nesting
La Salina	absent	absent	absent
Estero de Punta Banda, Ensenada	25-30 pairs, nesting	present	present, nesting
Bahia de San Quintin	present, presumed nesting	present at south end of bay	abundant, nesting
Laguna El Rosario	absent	absent	—
Laguna Manuela	present, presumed nesting	present	—
Estero de San Jose Guerrero Negro	present, presumed nesting	present	—
Laguna Ojo de Liebre (Scammons)	present, presumed nesting	not observed	—

in evidence, from eggs under incubation to fledged chicks. In July 1976 Least Terns were again nesting at this site (Sanford Wilbur pers. comm.).

At Bahia de San Quintin, Least Terns were fishing in the bay and flying with their catch to the barrier beach (Playa de Oeste Medaro) on the west side of the bay. This beach was inaccessible to us and nesting could not be documented, but the behavior of the birds was consistent with that of adults feeding young (Massey 1974). In July 1976 Wilbur found a small breeding colony on the *east* side of the bay, documenting San Quintin as a nesting site, although the major colony there has probably not yet been found.

The three lagoons around Guerrero Negro are vast and difficult of access, and we could give them only cursory coverage. Least Terns were seen and heard at all three places (Laguna Manuela, Estero San Jose, and Laguna Ojo de Liebre). They were fishing, carrying fish, and vocalizing as they do when breeding and we assumed that there were nesting colonies at all three lagoons.

No Least Terns were in evidence at La Mision (mouth of Rio San Miguel) or La Salina, two likely sites between Tijuana and Ensenada. Nor were there terns at Laguna El Rosario, 50 km south of San Quintin.

The Light-footed Clapper Rail was present at El Estero de Punta Banda, Bahia de San Quintin, Laguna Manuela and Estero San Jose. We found no rails at Laguna Ojo de Liebre, but were able to explore only a very limited portion of the east shore of this vast lagoon, and none of the saltmarsh on the southwest or west sides. Belding's Savannah Sparrows were nesting at La Mision, El Estero de Punta Banda, and Bahia de San Quintin, as has been previously reported (Bradley 1973). South of San Quintin another saltmarsh Savannah Sparrow, *P. s. anulus*, was in evidence at El Rosario, and was abundant in the *Salicornia* marshes of Laguna Manuela, Estero de San Jose, and Laguna Ojo de Liebre.

## NOTES

Between Laguna Ojo de Liebre and San Jose del Cabo there are many large and undisturbed lagoons that should provide ideal habitat for the Least Tern. It is probable that the birds nest all the way to the tip of the peninsula, since they were breeding at San Jose del Cabo 50 years ago (Lamb 1927). South of the 28th parallel, the coast is very difficult to explore, requiring approach either by sea, by 4-wheel drive vehicle if overland, or preferably by both routes. We were not equipped for such exploration, but urge that it be undertaken in the near future.

Time is short. The opening of the new road heralds many changes for Baja California. Before extensive development gets underway, essential habitats for endangered species should be documented. Protection of endangered species becomes an international problem when the birds do not recognize national boundaries. A joint Mexican-United States program is needed.

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## BULLETIN BOARD

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The Colonial Waterbird Group (CWG) was officially formed at the North American Wading Bird Conference at Charleston, South Carolina, on 16 October 1977. The CWG developed from two other newly organized groups, the Colonial Wading Bird Group and the steering committee for a proposed seabird group for central and eastern North America. The organization has the following immediate goals: (1) encourage and coordinate standardized surveys of colonial waterbirds; (2) publish a newsletter; (3) assist efforts by conservationists to protect and manage colonial waterbirds and wetland and coastal ecosystems; (4) act as a clearinghouse of information for ongoing research and research opportunities.

Chairperson of the steering committee is John C. Ogden, Secretary-treasurer is Joanna Burger, and Editor of the newsletter is Mitchell Byrd. Dues are currently \$5.00 per year.

Regional reporters are contacting persons working on colonial water birds and interested in doing so. To avoid duplication or competition with the Pacific Seabird Group, in the regions bordering the Pacific Coast, the CWG will be limited to colonial wading birds such as herons, ibises and storks. Westerners interested in wading birds are encouraged to write one of the following regional reporters:

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